

Claims

1. A thermally insulated container (101) for the transport of cargo (102), said container (101) comprising panels (103) comprising at least one outer layer/wall (104) and at least one inner layer/wall (105), between which layers/walls foam material (106) is arranged between the layers/walls (104, 105), being of metal and having a thickness in excess of 50 μm , **characterised in** that the foam material is an essentially closed cell foam material, said cells (107) enclosing at least two gases (108), said gases (108) having a value λ for thermal conductivity which is lower than that of atmospheric air; and that the gases comprise at least one blowing-agent gas and at least one additive gas and are present in the cells in an amount by weight corresponding to a closed interval corresponding to the ratio of 50:1 to 400:1.
2. A thermally insulated container according to claim 1, **characterised in** that the foam material (106) is a polyurethane foam.
3. A thermally insulated container according to claim 1 or 2, **characterised in** that the value for thermal conductivity is, at least for the additive gas, less than 20 mW/m $^{\circ}\text{K}$.
4. A thermally insulated container according to any one of the preceding claims, **characterised in** that the additive gas comprises an inert gas, eg argon.
5. A thermally insulated container according to any one of the preceding claims, **characterised in** that the layers/walls (104, 105) are manufactured from a steel alloy and/or an aluminium alloy.

6. A thermally insulated container according to any one of the preceding claims, **characterised in** that the distance between the inner layer (105) and the outer layer (104) is at least 35 mm; and that the cavity between the plane parallel inner and outer layers/walls is filled with foam material, said material
5 being in contact with both layers/walls and faces facing towards the foam material (106) and in the entire expanse thereof.

7. A thermally insulated container according to any one of the preceding claims, **characterised in** that the foam material (106) is a rigid or a semi-rigid
10 foam material.

8. A thermally insulated container according to any one of the preceding claims, **characterised in** that the average diameter of the cells is less than 0.4 mm, preferably less than 0.25 mm.
15

9. A thermally insulated container according to any one of the preceding claims, **characterised in** that the coefficient of diffusion of the foam material is less than that of atmospheric air.

20 10. A thermally insulated container according to any one of the preceding claims, **characterised in** that the blowing-agent gas comprises cyclopentan.

11. A thermally insulated container according to any one of the preceding claims, **characterised in** that one of the gases comprises CO₂.
25

12. Use of a thermally insulated container according to any one of the preceding claims for being integrated with/incorporated in a vehicle for providing a container vehicle/refrigerated lorry.